

What is claimed is:

- 1 1. A method comprising:
- 2 defining a process including at least one transaction;
- 3 storing a representation of the at least one transaction in a process-container;
- 4 transmitting the process-container to at least one remote entity;
- 5 receiving the process-container from the at least one remote entity; and
- 6 displaying contents of the process-container.

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5. A method comprising:

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defining a process including at least one transaction;

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storing the at least one transaction in a process-container;

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transmitting the process-container to at least one remote entity; and

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interacting with the process-container on the at least one remote entity.

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6. The method of claim 5 further comprising:

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receiving the process-container from the at least one remote entity.

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7. The method of claim 5 further comprising:

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displaying the contents of the process-container.

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1 8. A process-container comprising:

2 a logic module;

3 a storage module communicatively coupled to the logic module; and

4 an interface module communicatively coupled to the logic module.

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1 10. A process-container comprising:

2 a presentation module;

3 a logic module coupled to the presentation module; and

4 a data module coupled to the presentation module.

1 11. The process-container of claim 10 further comprising a journal module coupled to the
2 presentation module.

1 12. The process-container of claim 10 wherein the logic is coupled to the data module.

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1 13. A process-container comprising:

2 a data module;

3 a logic module coupled to the data module; and

4 a presentation module coupled to the data module.

1 14. The process-container of claim 13 further comprising a journal module coupled to the data

2 module.

1 15. The process-container of claim 14 wherein the logic is coupled to the journal module.

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1 16. A process-container comprising:

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at least one binder;

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at least one attachment coupled to the at least one binder; and

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at least one transaction coupled to the at least one binder.

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17. The process-container of claim 16 further comprising a journal coupled to the at least one

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binder.

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18. The process-container of claim 17 wherein the journal includes at least one mutation.

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19. The process-container of claim 17 wherein the journal includes a plurality of mutations

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grouped into at least one cycle.

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20. The process-container of claim 16 further comprising an identifier coupled to the at least one

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binder.

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21. The process-container of claim 16 further comprising a shell annotation coupled to the at

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least one binder.

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22. The process-container of claim 16 wherein the at least one binder includes at least one

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resource.

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23. The process-container of claim 22 wherein the at least one resource includes at least one of

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an opaque resource, an object resource, a meta-data resource, and a data resource.

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24. The process-container of claim 22 wherein the at least one resource includes a virtual

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uniform resource locator (VURL).

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25. The process-container of claim 16 wherein the at least one attachment includes at least one

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multipurpose internet mail extension (MIME) bytestream.

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26. The process-container of claim 25 wherein the at least one MIME bytestream includes at

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least one application document.

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27. The process-container of claim 16 wherein the at least one attachment includes at least one

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application document.

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- 1 28. The process-container of claim 16 wherein the at least one transaction includes at least one
2 resource.
- 1 29. The process-container of claim 28 wherein the at least one resource includes at least one
2 extensible markup language (XML) document.
- 1 30. The process-container of claim 29 wherein the at least one XML document is compliant to an
2 external document type definition (DTD).
- 1 31. The process-container of claim 16 wherein the at least one transaction includes at least one
2 data processing instruction.
- 1 32. The process-container of claim 16 wherein the process-container is operable to be executed
2 on a peer.
- 1 33. The process-container of claim 16 wherein the process-container is operable to be
2 transmitted between a plurality of peers.
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1 34. A peer for executing a process-container comprising:
2 a runtime support environment including
3 an engine wherein the engine includes at least one of means for object mapping,
4 means for persistence, means for journaling, means for querying, means for schema validation,
5 means for compounding documents, and means for synchronizing documents.
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1 35. A peer for executing a process-container comprising:

2 a runtime support environment including

3 an engine;

4 an extension application program interface (API) coupled to the engine; and

5 at least one process-container extension coupled to the extension API.

1 36. The peer of claim 35 wherein the at least one process-container extension includes at least

2 one of a gateway extension, a workflow extension, a rules extension, a protocol extension, and a

3 transport extension.

1 37. The peer of claim 35 wherein the virtual machine includes a Java virtual machine.

1 38. The peer of claim 35 wherein the engine includes

2 a support module;

3 a runtime module coupled to the support module;

4 a core module coupled to the runtime module; and

5 a process-container module coupled to the core module.

1 39. The peer of claim 38 wherein the engine further includes at least one API.

1 40. The peer of claim 39 wherein the at least one API includes at least one of an extension API,

2 a JavaScript API, and a XML component language (XCL) API.

1 41. The peer of claim 38 wherein the support module includes at least one of an interpreter

2 package, a language parser package, a extensible stylesheet language transformation (XSLT)

3 processor, a XML path language processor (XPath), a servlet package, a naming interface

4 package, a directory interface package, a message service package, a mail package, and an

5 activation framework package.

1 42. The peer of claim 38 wherein the runtime module includes at least one of a persistent store

2 subsystem, a process-container session subsystem, a verb protocol subsystem, a process-

3 container event interface, a process-container packet interface, a process-container attachment

4 interface, a process-container email interface, a process-container message interface, and a

5 process-container service interface.

1 43. The peer of claim 38 wherein the core module includes at least one of means for object

2 mapping, means for persistence, means for journaling, means for querying, means for schema

3 validation, means for compounding documents, and means for synchronizing documents.

- 1 44. The peer of claim 38 wherein the process-container module includes at least one process-
2 container.
- 1 45. The peer of claim 38 wherein the process-container module includes at least one of a binder,
2 an attachment, a transaction, and a journal.
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1 46. A system for automating a process comprising:
2 at least one process-container; and
3 at least one peer;
4 wherein the at least one process-container includes data and instructions relevant to a
5 process and wherein the at least one peer is operable to execute the instructions, transmit the
6 process-container, and receive the process-container.
- 1 47. The system of claim 46 wherein the at least one process-container is mobile.
- 1 48. The system of claim 46 wherein the at least one process-container is self-contained.
- 1 49. The system of claim 48 wherein the at least one process-container is self-contained wherein
2 the peer is operable to execute the process-container without reference to other resources.
- 1 50. The system of claim 48 wherein the at least one process-container is self-contained wherein
2 the peer is operable to execute the process-container off-line.
- 1 51. The system of claim 46 wherein the at least one process-container is asynchronous.
- 1 52. The system of claim 46 wherein the at least one process-container is executable.
- 1 53. The system of claim 46 wherein the at least one process-container is visualizable.
- 1 54. The system of claim 53 wherein the at least one process-container is visualizable as a web
2 site.
- 1 55. The system of claim 46 wherein the at least one process-container is an agent.
- 1 56. The system of claim 46 wherein the at least one process-container is operable to provide a
2 communication link to a peer on a remote system.
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1 57. A device, comprising:

2 a processor; and

3 a storage device coupled to said processor and storing instructions adapted to be
4 executed by said processor to:

5 define a process including at least one transaction;

6 store a representation of the at least one transaction in a process-container;

7 transmit the process-container to at least one remote entity;

8 receive the process-container from the at least one remote entity; and

9 display contents of the process-container.

1 58. A medium storing instructions adapted to be executed by a processor to perform a method
2 of collaborating, said method comprising:

3 defining a process including at least one transaction;

4 storing a representation of the at least one transaction in a process-container;

5 transmitting the process-container to at least one remote entity;

6 receiving the process-container from the at least one remote entity; and

7 displaying contents of the process-container.

1 59. A medium transmitting instructions adapted to be executed by a processor to perform a
2 method of collaborating, said method comprising:

3 defining a process including at least one transaction;

4 storing a representation of the at least one transaction in a process-container;

5 transmitting the process-container to at least one remote entity;

6 receiving the process-container from the at least one remote entity; and

7 displaying contents of the process-container.

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- 1 60. A computer-readable medium that stores program code and data accessible by and
2 executable by a processor in a data processing system, the program code and data including:
3 a first module operable to define a process including at least one transaction;
4 a second module operable to store a representation of the at least one transaction in a
5 process-container;
6 a third module operable to transmit the process-container to at least one remote entity;
7 a fourth module operable to receive the process-container from the at least one remote
8 entity; and
9 a fifth module operable to display contents of the process-container.

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- 1 61. A system for collaborating comprising:
2 means for defining a process including at least one transaction;
3 means for storing a representation of the at least one transaction in a process-container;
4 means for transmitting the process-container to at least one remote entity;
5 means for receiving the process-container from the at least one remote entity; and
6 means for displaying contents of the process-container.

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- 1 62. A system for process automation comprising:
2 means for defining a process including at least one task;
3 means for storing a representation of the at least one task in a process-container;
4 means for transmitting the process-container to at least one remote entity;
5 means for performing the at least one task on the at least one remote entity; and
6 means for updating the process-container based on performance of the at least one task.

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- 1 63. The system of claim 62 further comprising:
2 means for receiving the process-container from the at least one remote entity; and
3 means for displaying contents of the process-container.